PlateScan User Guide
Version 7.9

October 15, 2007

CONFIDENTAL

PlateScan
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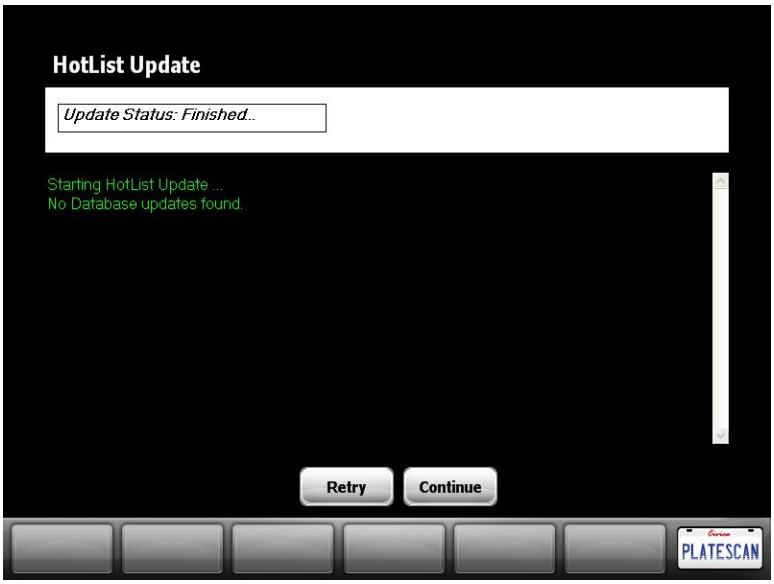
Contents

1. First Time

This section will describe the basics of getting started with Platescan and what it takes to begin reading license plates. When Platescan is finished loading, you will see a screen much like this.

*(**Please Note:** Each Agency / Department will have their own custom startup screen)*

To begin using Platescan, click the **Start Of Watch** button, located in the bottom left corner. You will be brought to this screen.



Since it is your first time starting Platescan we can skip the HotList Update and just click **Continue**, which will bring us to the main interface. To learn more about Hotlist updates read section 4.b.

The picture above is the main screen. Now you are ready to start reading license plates. Section 3 will describe the buttons on the main screen and how to manipulate the interface.

2. Basic Usage

This section will quickly explain how license plate recognitions are handled by the system and displayed to the user.

Above is a screen shot of the Platescan interface when you first start it. Below is a screenshot of Platescan with some recognitions.

The major parts are labeled, and will be explained below.

A. This is the overview image, it will provide a picture of the license plate, along with the car. Clicking on this will provide you with an enlarged view of the image, click on the image again to go back to the main interface.

B. This is the recognition image, this is the picture that the actual license plate recognition happens from. Clicking on this will provide you with an enlarged view of the image, click on the image again to go back to the main interface.

C. This is the recognition field, this is what the system read from the recognition image.

D. This is the Plate Log, it will display all the plates read for that shift, clicking on a specific plate will bring up the appropriate overview and recognition image.

When a license plate is matched to a database, a new screen will take over the computer and verbally alert the user. For more information on alerts, see section 5.

All recognitions and alerts are stored for later use and can also be searched for later; this is explained in detail in section 7.

3. Interface

A. Button functions

There are a number of buttons on the main screen. This section will briefly explain the buttons and where you can find more in-depth explanations of their functions.

- Starting with the top of the interface, the **Camera Setup** button is used to calibrate the camera positions. It should *only* be used by Platescan technicians.

- The **Mini** button will minimize the program. You can run the Platescan program minimized the entire time. If an alert for a database match was to happen, that alert would take control of the screen, along with a verbal alert to notify the user, more information on alerts in section 5.

- The **System Setup** will bring you to the screen below.

Here you can change the interface color template. The number of cameras displayed on the main interface, and the volume at which alerts are played. If you want a system color or a camera mode to be used every time Platescan starts up, check the 'Set as Default' checkbox next to the appropriate option.

- The **I.R.** and **Video** buttons below the Camera display will give you a live feed of the cameras. If the camera is a color camera, the **I.R.** and **Video** buttons will do the same thing and show you a black and white video feed. If you are using a infrared camera, the **I.R.** button will show you a feed of the infrared display, the **Video** button will show you a black and white feed of that same camera. The **Pic** button located next to the **I.R.** and **Video** buttons will show you a snapshot of the vehicle and license plate when a license plate recognition occurs. This snapshot will update each time a new license plate is read. The **Pic** button is selected as the default option. ***NOTE*** viewing the **I.R.** or **Video** stream will put additional stress on the CPU. Unless actively viewing a camera stream, it is recommended to set the camera back to **Pic**. If you are viewing multiple video streams, your license plate recognitions might be delayed by a few seconds because of the additional CPU power needed to view multiple video streams.

- The bottom row of buttons begins with **Exit**. This will exit Platescan; it will show you this confirmation box.

You can either **Cancel** and return to Platescan or you can click **No** and exit Platescan, additionally you can click **Yes** and export your plate recognitions to a XML file. For more on exporting plates, see section 8.

- **Manual Entry** allows the user to type in a license plate by hand. This can either be done to check that license plate against a Hotlist, or it can also be done to quickly add a license plate to a custom Hotlist. You can read more on custom Hotlists in section section 4.C, and manual entries in section 6.

- **Search Logs** allows you to search license plates that the system has previously read. You can either search for a specific plate, or a partial plate using '*' as a wild character. More on Search Logs in section 7.

- **Alarm Log** is very similar to Search Logs, but this will only display previous alerts from the current shift. More on this in section 7.

- **Digital Recorder**, with the appropriate DVR system, you can capture and save the video streams from the cameras.

- The **Platescan** button allows you to manipulate the number of cameras displayed on the main interface. More in depth information can be found in the section below, 3.B

B. Interface Manipulation

Each Platescan car is unique and can have anywhere from one to four cameras set up. Our interface can also support anywhere from one to four cameras. If you click on the **PLATESCAN** button in the lower right corner of the interface, it will cycle through the number of cameras in the interface. Below are screenshots of the one, two, and three camera layouts.

Our default layout for a four camera system is the two camera view. ***NOTE*** Even though only two cameras are shown on the interface, you will still get recognition and alerts from all four cameras, but it will group two cameras together on one screen and will share output. You can choose whatever number of cameras you are most comfortable with. In order for the program to start up with your preferred number of cameras on screen, you will have to set it as default in the **System Setup**, more on the System Setup can be found in section 3.A.

Another part of the interface is our SoftKeyboard, below is a screen shot.

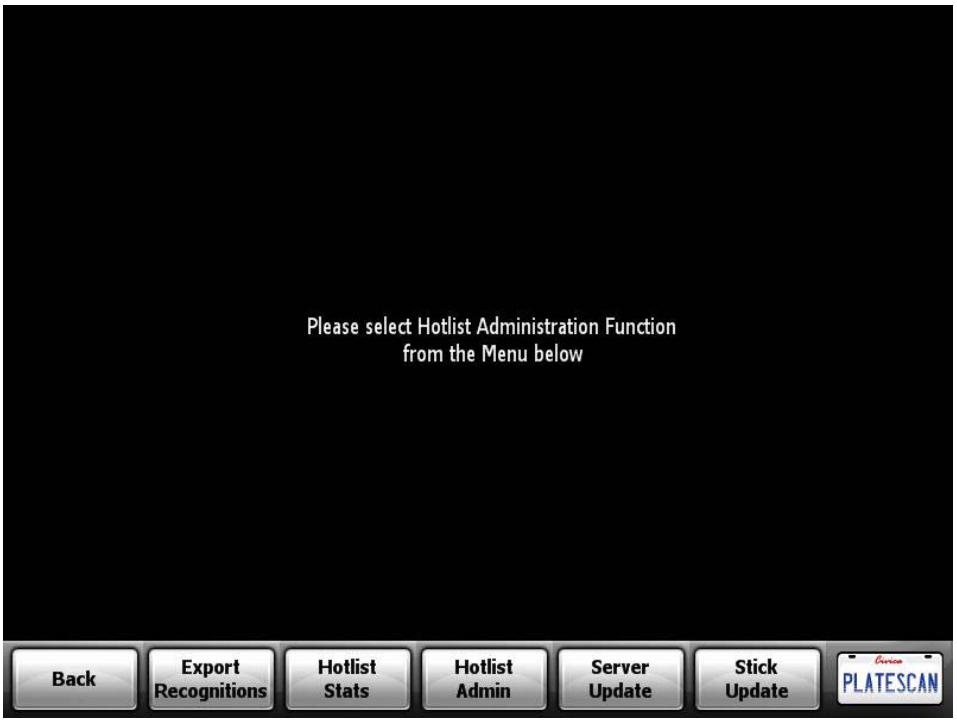
Anytime a user interacts with a field that requires keyboard input, this SoftKeyboard will take control of the screen. The buttons are designed to easily interact with a touch screen, but if the user is more comfortable using the keyboard, then they can type with the keyboard the same way they would normally. The SoftKeyboard display goes away after clicking the Enter button, or the Enter key on the keyboard.

4. Hotlist

A. Basic Functions

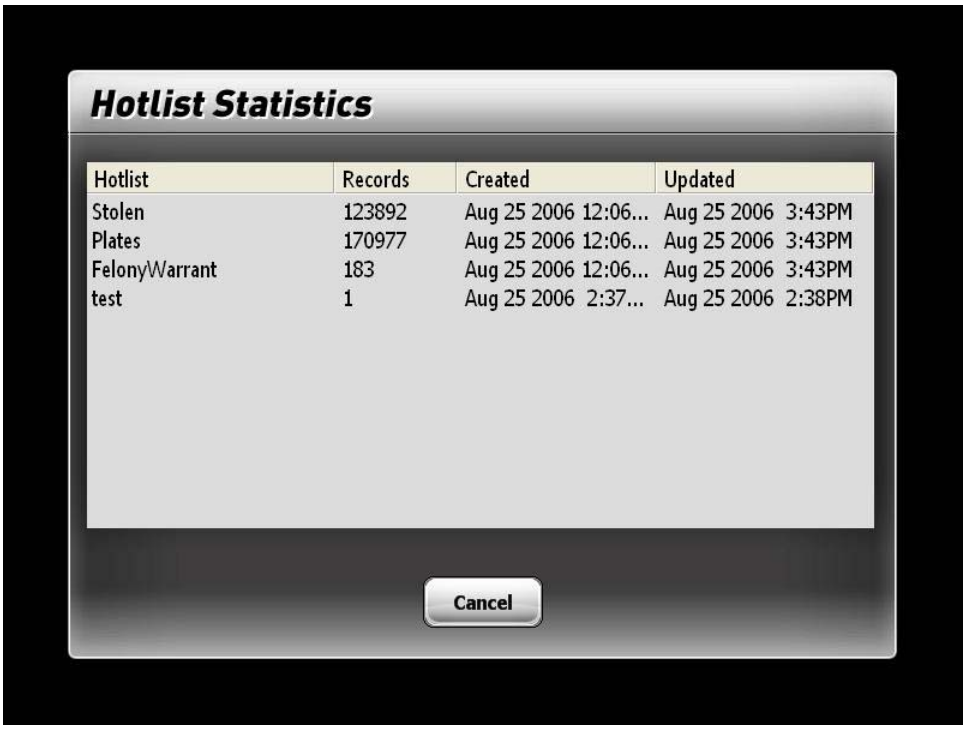
This section will briefly describe the Hotlist Menu and where you can get more information for each specific function.

Below is a screen shot showing the **Hotlist Menu**, this can be accessed by clicking the **Hotlist Menu** button on the main screen.



- **Export Recognitions**, this button will let you export previous recognitions to either a external device, such as a USB memory stick, or the hard drive. More on this in section 8.

- **Hotlist Stats** will bring you to the screen below. This screen will show you all current Hotlists in the system. It will show you the name of the Hotlist, how many license plate records are in each Hotlist, when the Hotlist was created, and when it was last Updated. You can check this screen after a Hotlist update to double check that everything updated correctly.



- **Hotlist Admin** is there to let you manage custom Hotlists. More on this in section 4.C

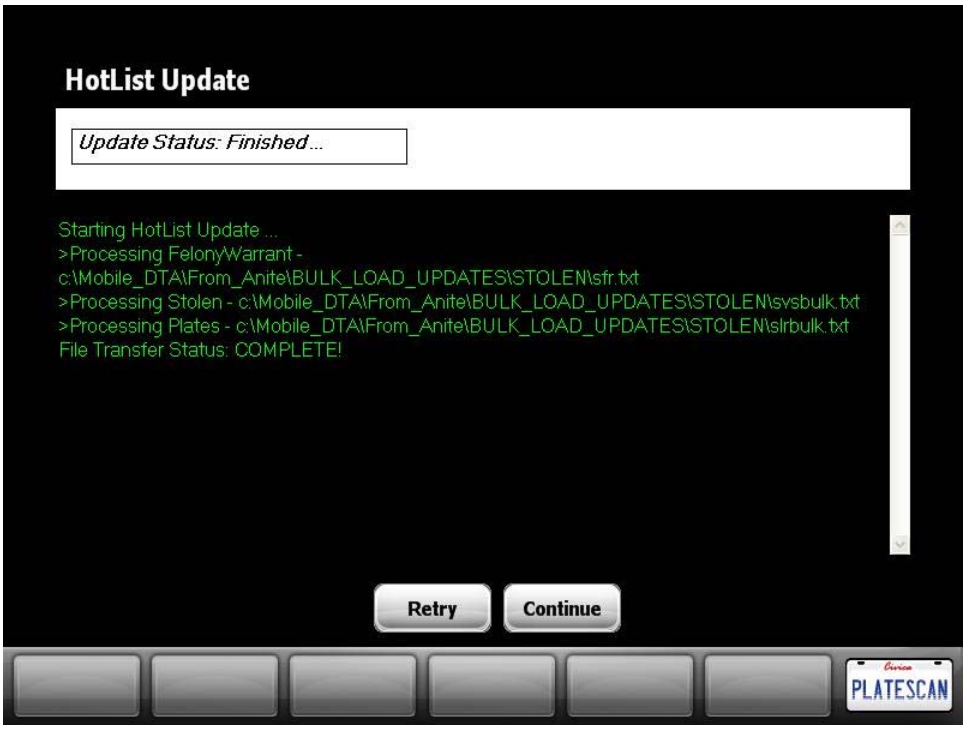
- **Server Update** button is a function that is in development and currently not active.

- **Stick Update** will let you update the Hotlists from a external file. More on this is in section section 4.B

B. Updating Hotlists

There are two ways to do a Hotlist update. The most common way is to have a new Hotlist plugged into the USB port before Platescan loads. After the initial loading of Platescan and after you click the **Start Of Watch** button, Platescan will automatically detect any Hotlists and update them.

In order to do a Hotlist update after Platescan has already been loaded, is to click the **Hotlist Menu** button on the main screen. Then clicking the **Stick Update** button will bring you to the same screen that you get after loading Platescan and clicking the **Start Of Watch** button.



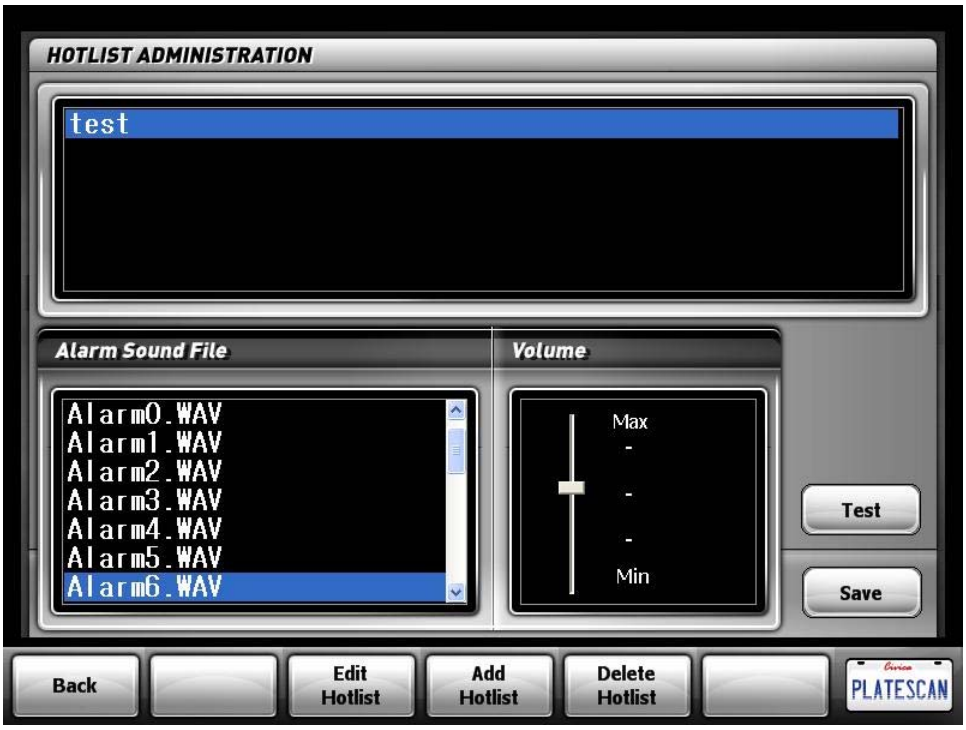
You will see a similar screen, as seen above, after a Hotlist Update is finished, the actual text might vary. To finish the update click **Continue**, it might be a good idea to check the Hotlist Stats to make sure that everything was updated correctly. To do this, from the main Platescan screen, click **Hotlist Menu**, and then click on **Hotlist Stats**. The time and date of the Hotlist Update will be current if the Hotlists were updated.

C. Managing Hotlists

There are primary Hotlists which can not be edited directly by the user. The user can update them by using the Hotlist Update, but aside from that, the user can not directly add or delete any entries in the primary Hotlists.

The Hotlist Admin will allow you to create and delete custom Hotlists, add and delete full or partial license plates of interest, and also assign an alert sound to each custom Hotlist. If the license plate in a custom Hotlist gets a read, you will get a alert just like with other Hotlists.

To access the Hotlist Admin, on the main screen click the **Hotlist Menu** button, then the **Hotlist Admin** button. You will see the screen below.

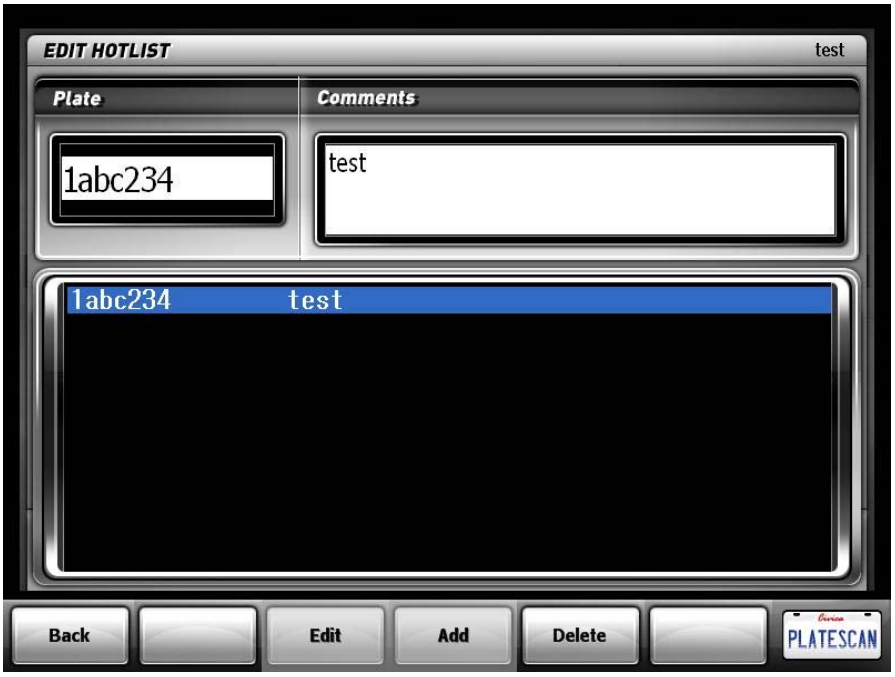


The top field displays all the custom Hotlists. In the screenshot above, there is one Hotlist named 'test'. There are a variety of alarm sounds which can be assigned to each custom Hotlist. You can click the **Test** button to hear the alarm and also change the volume. Once satisfied with the volume and alarm sound, click **Save**. The alarm sound and volume are now saved to that particular Hotlist.

The buttons on the bottom row are **Add Hotlist,** which will give you a simple prompt for a Hotlist name. That is all it takes to create a new Hotlist.

Deleting a Hotlist is just as simple. Select the desired Hotlist and click the **Delete Hotlist** button. You will get a confirmation dialog at which stage the Hotlist will be deleted.

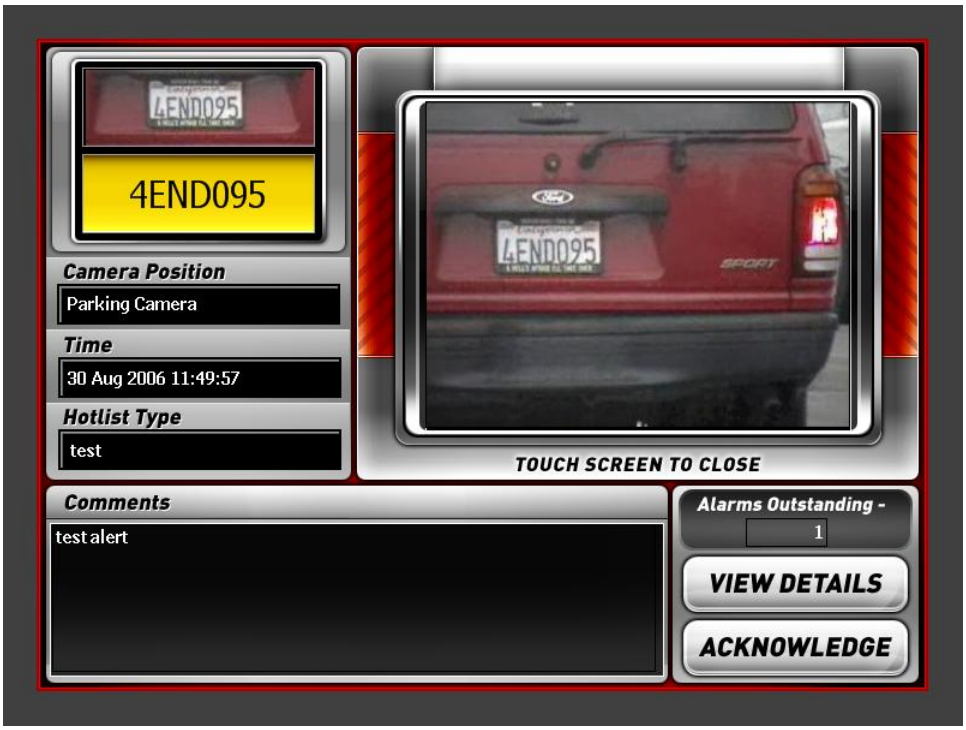
The **Edit Hotlist** button will allow you to add license plates to your custom Hotlists. Select the desired Hotlist and click the **Edit Hotlist** button, you will be brought to the screen below.



In order to add a license plate, first fill out the plate field, then the comments field and click **Add**. If you want to add a partial plate, you can use the '*' character as a wildcard. Example: 5* would return any plate that begins with 5 and has any characters, no matter how many or few after the 5. 1AB3*5 will match any plate that begins in 1AB3, has any character or characters after that and then ends in a 5.

In order to edit a plate, select the already added plate, and click the **Edit** button. To delete a plate, select a plate you wish to delete and click **Delete**.

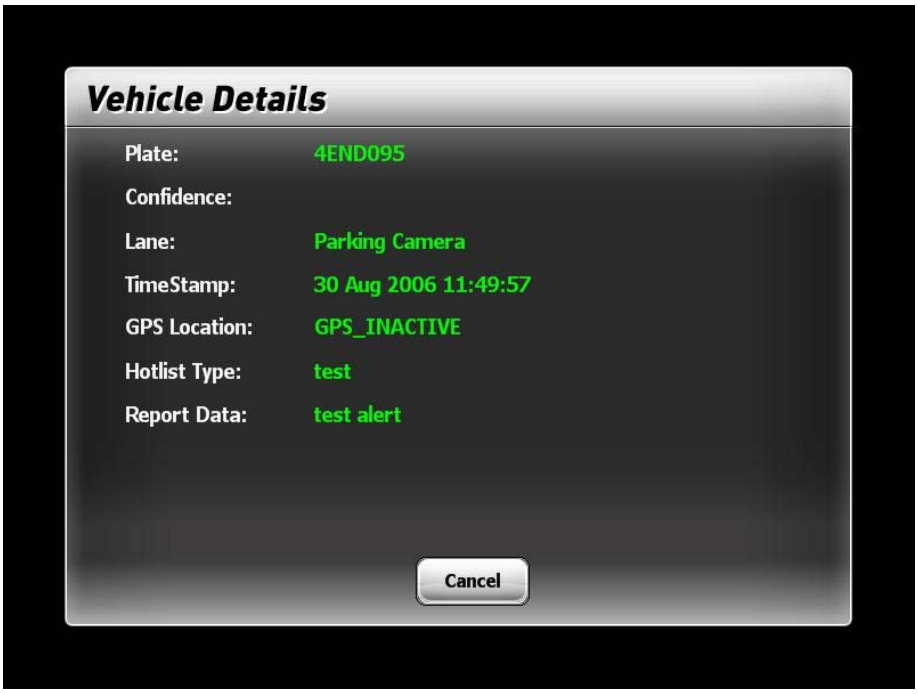
5. Alerts



This is a screenshot of a Alert. Anytime a license plate is read and matches that of a license plate in a Hotlist, you will get a full screen alert that will take over the screen until the 'Acknowledge' button is clicked. Along with the full screen alert, a verbal alert is also announced, for example. "Stolen Vehicle, Parking Camera." There are two parts to this verbal alert, the first part is the Hotlist alert sound. For custom Hotlists this will just be a random sound selected by the creator of the Hotlist, for the built in Hotlists, it will say Stolen Plate, Stole Vehicle, or Felony Warrant. The second part is which camera the license plate was picked up from. Front Left, Front Right, Parking Camera, or Rear Left are the default cameras.

The major parts of the alert are, the overview image of the car, along with the recognition image of the license plate, and the recognition text for that image. The alert also displays which camera the recognition happened on, the time, which Hotlist the alert is from and any comments. Comments are mostly only used in custom Hotlists.

If you click the View Details button you will get the screen shown below.

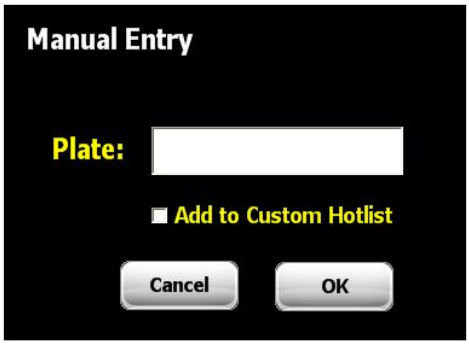


This screen gives you the same details as the actual alert, but you can also view the GPS location if the vehicle is outfitted with GPS.

Alerts, along with recognitions are stored in a database. The alerts and recognitions database can be searched through at anytime. More on this in section 7.

6. Manual Entry

Manual Entry, found on the main screen, allows the user to manually enter a plate into the system to compare it to the Hotlists. You can also use this function to quickly add a plate of interest to a custom Hotlist. When clicking on the Manual Entry button, you will get the below screen.



Enter the plate, if you just want to compare the license plate to the plates in the Hotlists, do not check the 'Add to Custom Hotlist'. If you are using Manual Entry to quickly add a plate to a custom Hotlist, then check the option.

Below is a screen shot of a manual entry.

The major differences are, there won't be a corresponding overview and recognition image to go along with the manual entry, so it will display the Platescan logo. It will also state in the log details that the entry was manual and not an automatic recognition.

7. Logs

There are two log buttons on the main interface. **Search Logs**, and **Alarm Log**. They function very similar, with the exception that the **Search Logs** button will provide you with a searchable database of recognitions and alerts that the system picked up over time. The **Alarm Log** button will automatically display any alerts for the current shift.

This section will explain how to search through the Plate Logs, these same instructions can be used for the Alarm Logs, but you will need to click the **Searching Alarm Log** button. By default, the **Searching Plate Log** button is selected. Below is a screenshot of the Search Logs screen.

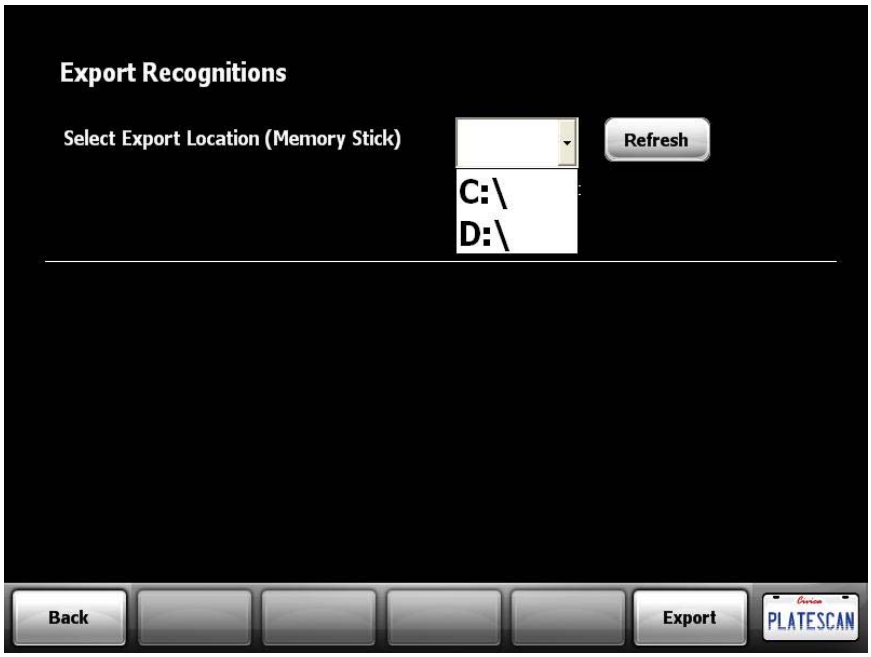
In the Enter Plate field, you can either enter a full plate, or use the '*' character as a wildcard. For instance 4* displayed every plate that began with 4. 1*234 would return any plate that begins with 1, has any characters in the middle, and ends in 234.

You can click on each plate entry to see the overview and recognition image of the license plate. You can also view the details, which will bring you to the screen below.

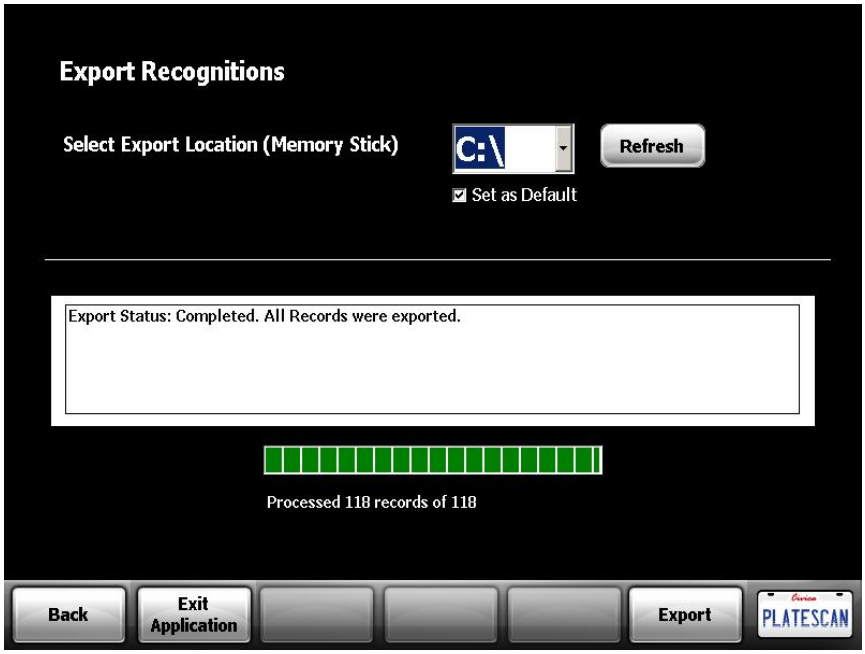
8. Exporting Data

Data is commonly exported onto an external device, such as a removable hard drive, or USB memory stick. There are two ways of exporting data. Either when you shut down Platescan, by pressing the **Exit** button on the main screen, (it will ask you whether you want to export your data before shutting down). Or you can click on the **Hotlist Menu** on the main screen and then click **Export recognitions**. Either way, you will be brought to the screen below.

Here you can see how many recognitions occurred for the shift, and also since the last export. You can export data from specific dates or times of date, or everything in the database. Clicking the **Next** button will bring you to the screen below.



Here you select which location you want to export the data too. The **Refresh** button will allow you to rescan for any external devices, such as USB drives that were added after Platescan was launched. Most commonly, C:\ is the local hard drive, and the last letter you see on your list is the external device. But each system is unique and you need to verify which drive letter is the source that you want to export to. Clicking the **Export** button will bring you to the screen below, once the export is finished.



Verify that the file is in the location that you chose to export it to.